

GESNERIADS

The Journal for Gesneriad Growers

Vol. 59, No. 3

Third Quarter 2009



Episcia cupreata



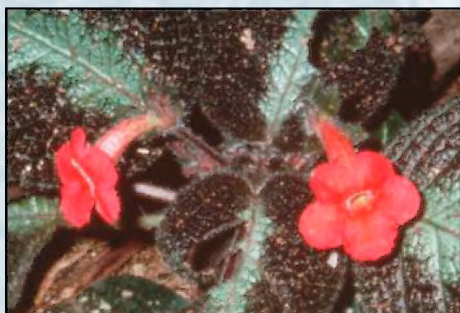
Episcia xantha



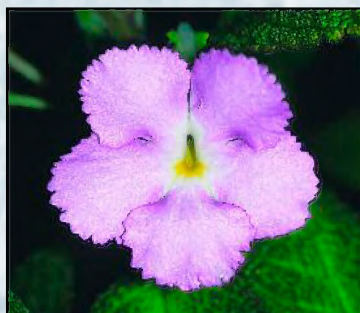
Episcia sphenoloba



Episcia fimbriata



Episcia reptans



Episcia lilacina

Episcias

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A non-profit membership corporation chartered by the State of Missouri

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Judges Interest Group — Calendar year subscription to *Appraisal* newsletter, 3 issues, \$6 (postal mail) or \$3 (e-mail/full color). Send to Jennifer Howland, 361 Townhouse, Hershey, PA 17033-2385. (Subscribing to *Appraisal* is part of the responsibility of remaining an active judge.)
Gesneriad Hybridizers Association — *CrossWords*, 3 issues, \$8 (\$9 outside U.S.A.). Send to Martha Lacy, 260 Stoddards Wharf Rd., Gales Ferry, CT 06335 <wlacy@snet.net>.
Newsletter Editors — *Newsviews*, free to editors; \$6 subscription to others. Contact Leslie Milde, 373 Main St., P.O. Box 14, Fremont, NH 03044 <meribush@aol.com>

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British Streptocarpus Society — <www.streptocarpusociety.org.uk> To join from the USA/Canada send \$12 check payable to Dale Martens, 1247 Island View Dr., Sherrard, Illinois 61281. To join from any other country, send £8 or 12€ to Peter Pinches, 72 Coopers Rd., Handsworth, Birmingham, England B20 2JX.
Marie Selby Botanical Gardens — 811 South Palm Avenue, Sarasota, FL 34236 (914-366-5731) <www.selby.org>
Gardens open 364 days a year from 10:00 a.m. to 5:00 p.m. Admission free; members free. Outdoor gardens, tropical display house, tree lab, al fresco lunch cafe, plant, book and gift shops.

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Second Quarter January 1
Third Quarter April 1
Fourth Quarter July 1

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OBJECTS OF THE SOCIETY — The objects of The Gesneriad Society are to afford a convenient and beneficial association of persons interested in gesneriads, to stimulate a widespread interest in, gather and publish reliable information about the identification, correct nomenclature, culture and propagation of gesneriads; and to encourage the origination and introduction of new cultivars.

GESNERIAD REGISTRATION — The Gesneriad Society, Inc. is the International Registration Authority for the names and cultivars of gesneriads excepting the genus *Saintpaulia*. Any person desiring to register a cultivar should contact Judy Becker, 432 Undermountain Road, Salisbury, CT 06068 <hybridregistrar@gesneriadsociety.org>.

visit
www.gesneriadsociety.org

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President's Message

Peter Shalit <president@gesneriadsociety.org>
Seattle, Washington, USA

The Gesneriad Society Board of Directors held its annual Retreat this past February in Atlanta, Georgia. The mid-year gathering is an opportunity for the Board to discuss a range of topics of interest to the Society and to set goals via a format that, while structured, is less formal than the annual Board meeting in July. A brief interim Board meeting is held at the end of each Retreat to take official action on a few matters in a timely fashion. In addition, at our recent Retreat the Board heard an update by John R. Clark on the Gesneriad Research Center in Sarasota, Florida, and saw a presentation by John L. Clark on his recent gesneriad explorations in Cuba.

Our host for the Retreat was the Atlanta Botanical Garden. We are grateful for their hospitality in providing us with meeting space at a nominal fee. We also thank Candice Eckard of the ABG for taking us on a tour of the Garden's extensive gesneriad collection. After the Retreat, we enjoyed a Sunday brunch hosted by Kathy Spissman and the Atlanta Gesneriad Study Group at the home of Kathy and her husband. Special thanks to Jeanne Katzenstein for organizing the Retreat logistics and to Dee and Bob Stewart for chairing the discussions during the Retreat and keeping us all on track.

The Board is always looking for new ways to promote gesneriads and the Society to the general horticultural public. At our Retreat we discussed the opportunity for Society members to approach their local retail garden centers with materials promoting gesneriads. In that regard I am pleased to report that my local chapter, the Puget Sound Gesneriad Society, recently held our annual show at a local retail garden center for the first time, and it was a great success.

You may remember that our chapter had to find a new venue for our show after being priced out of our previous one, The Center for Urban Horticulture, where we were outbid by the wedding trade. We were fortunate that Swanson's Nursery stepped in and not only gave us space for our show in one of their sales greenhouses, but also actively promoted our show, permitted us to hold the show the entire weekend, and (amazingly) did not charge us a cent.

As always, we held our show and sale in conjunction with that of the Seattle African Violet Society. It was wonderful to have the show in a greenhouse. The diffuse natural light, through frosted roof panels, was better than any lighting I have seen in a gesneriad show. We were fortunate to have six Gesneriad Society-certified judges for our show. A good time was had by all.

Our annual show attracts a group of dedicated fans who come every year to see the show and buy plants. Some even eventually join one of the clubs. This year we had additional foot traffic from customers who came to shop for spring bedding plants and found our show by accident. A number of nursery employees also visited the show and purchased plants. After a few hours, the sales table was reduced to a few scragglers. Every *Chirita*, *Kohleria*, and *Sinningia* sold. (Note to self: propagate more of these genera for next year's sale.) Borrowing from a tradition of the African Violet Chapter, we put price tags on many of our show plants as well. I entered six mature, blooming *Kohlerias* and all six sold to members of the public. The benefits to me: I

don't have to carry the plants home, I free up space in my light garden, and I have the satisfaction of knowing that someone else is enjoying a show-quality plant that I grew.

Although many people visited our show, we did not give them a hard sell to join our chapter. We promoted the Society in more subtle ways. Each of my sale plants (and that's over 100 plants) had a promotional Gesneriad Society label. These labels are available from the Society (see ad on page 41) and I encourage you to order some for your sale plants. We also had a table with pictures of gesneriads, information about the Society, and full-color promotional brochures. (The electronic file for the brochures is also available on our Website.) I'm sure that someone who purchased a plant will find our Web address on the label, go to our website, learn more about our plants and our organization, and join. It may take time, but it will happen more and more as we get the word out.

So if you belong to a chapter or even if not, you might check out your local garden center to see whether they would agree to host a gesneriad show or display. It's a great venue. The garden center gets increased foot traffic and more customers. You get to show off your plants to fellow plant enthusiasts. Your chapter, the Society, and the gesneriad family all get increased visibility. Everyone benefits.

Good growing,

Peter



Puget Sound Gesneriad Society show at Swanson's Nursery

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Retreat Board Review 2009

Allison Brigham, Recording Secretary
Golden, Colorado, USA

The Gesneriad Society Board of Directors held a mid-year meeting on February 7, 2009 during its Retreat at the Atlanta Botanic Garden, Atlanta, Georgia, USA. President Peter Shalit presided.

The name of the fund established in 2008 to collect donations to be held and granted to The Gesneriad Research Center (GRC) at the Marie Selby Botanical Gardens in Sarasota, Florida, USA, was changed to The Gesneriad Research Center Fund. Dr. John L. Clark, serving as both the chair of this fund and a member of the GRC's senior advisory committee, will ensure good relations and communication between the Society and the GRC.

The Board expressed its continued appreciation to the Atlanta Botanic Garden for allowing the Society to hold its mid-year Retreat there again by approving a donation in recognition of its continuing support of gesneriads.

In other actions, the Board elected Rebecca Fontes to continue in the office of Treasurer. Her two-year term began in July 2008. The Board agreed to conduct an annual internal financial review and an external audit every third year. Treasurer Rebecca Fontes will investigate the requirements necessary to schedule and prepare for an audit in 2010. She will review the Society's most recent audit with former Treasurer Helen Bortvedt.

Coming Events

September 11-12 – Florida – *Gesneriad Celebration* presented by the Tampa Bay Gesneriad Society at USF Botanical Gardens Conservatory and Plant Shop, Pine Ave. on USF Campus (4202 E. Fowler Ave.). Display and sale of gesneriads, including lectures and re-potting demonstrations, Friday 9:00 am – 4:00 pm; Saturday 9:00 am – 3:00 pm. Free admission and parking. Contact 813-963-7424 or 4jam@tampabay.rr.com.

September 11-13 – Tennessee – Tennessee Gesneriad Society annual show and sale at the Botanic Hall of the Tennessee Botanical Gardens (Cheekwood), 1200 Forrest Park Dr., Nashville. Saturday 9:30 am to 4:30 pm; Sunday 11:00 am to 4:30 pm. Contact Julie Mavity-Hudson <Julie.mavity@gmail.com>.

September 19-20 – Missouri – Heart of America Gesneriad Society annual judged show and sale at Loose Park Garden Center Building (816-784-5300), 5200 Pennsylvania Ave., Kansas City.

Entries accepted Friday 8:30 – 11:00 am. Open to the public on Saturday and Sunday 10:00 am to 3:00 pm. Contact Susan Grose <sagrose@aol.com>.

September 26-27 – Massachusetts – Annual combined plant societies judged show and sale at the Tower Hill Botanic Garden, 11 French Drive, Boylston. Saturday 10:00 am to 5:00 pm; Sunday 10:00 am to 4:00 pm. Participating will be the New England Chapter of The Gesneriad Society and the Buxton Branch of the American Begonia Society. Admission: \$10 adults; \$7 seniors; \$5 youths (6-18). Contact Lilya Veneziano (617-479-3680).

October 4 – New Jersey – Frelinghuysen Arboretum Gesneriad Society annual judged show and sale at the Frelinghuysen Arboretum in Morristown. Sunday 11:00 am – 3:30 pm. Free admission and parking; handicapped accessible. Contact Karyn Cichocki <kdc05@ptd.net> (973-579-7914).

In Memoriam: Albert Buell

Al Buell, "Mr. Gloxinia", passed away on April 10, 2009 at the age of 91 in Connecticut, the state where he was born and lived his entire life.

Al was best known for Buell's Greenhouses, a premier gesneriad establishment in Eastford, Connecticut, which was in business for more than 60 years. He began hybridizing Florist Gloxinias in 1941. By the 1960's he had developed his world-famous strains of Buell Hybrid Gloxinias. Old-time members of this Society will recall his color catalogs full of photos of luscious blooms in colors and patterns never before seen.

Al and his wife Diantha were devoted members of our Society and were fixtures at our conventions. His name appeared over the very first article in Volume 1, Number 1 of THE GLOXINIAN. Al was given an Honorary Life Membership in 1963 and served on the Society's Board during the 1960's. He will be missed.



- Episcias available in a 1966 catalog from Buell's Greenhouses:
1) *Episcia* 'Acajou', 2) *E.* 'Chocolate Soldier', 3) *E.* 'Colombia Orange',
4) *Alsobia* (*Episcia*) *dianthiflora*, 5) *Episcia* 'Ember Lace',
6) *E.* 'Emerald Queen', 7) *E.* 'Green Haga', 8) *E.* 'Jean Bee',
9) *E. lilacina*, 10) *E. lilacina* 'Fanny Haage', 11) *E.* 'Moss Agate',
12) *E.* 'Noel', 13) *E.* 'Orange Princess', 14) *E.* 'Painted Warrior',
15) *E.* 'Canal Zone Hybrid', 16) *E.* 'Pinkiscia', 17) *E. reptans* 'Bronze Queen',
18) *E.* 'Shimmer', 19) *E.* 'Silver Sheen', 20) *E.* 'Tropical Topaz'
(photo by Al Buell)

Seed Fund

Carolyn Ripps <rippscs@aol.com>
Gussie Farrice <f.farrice@verizon.net>

Here we go again! The botanists amongst us have changed more names, so we're busy rewriting labels. The Seed Fund listings already reflect the changes, so check that you don't already have a species under its old name before you order what appears to be a new item.

First you'll notice that the listings under the genus *Amalophyllon* have changed. A recent study reported in *Selbyana*, the journal of the Marie Selby Botanical Gardens, has transferred several species that were formerly called *Phinaea* to *Amalophyllon*. Only a few of the newly renamed species are currently available through the Seed Fund, and they will be listed with both names for a while. *Phinaea divaricata* and *Phinaea ecuadorana* have been renamed *Amalophyllon divaricatum*, *Amalophyllon* sp. RM2006 (Belize) has been provisionally published as *Amalophyllon rupestre* with collection number RM2006, and the plant formerly distributed as *Phinaea* sp. USBRG 96-336 has been published as *Amalophyllon clarkii* with collection number USBRG 96-336. It's a good idea to retain the collection number on your label as a further verification of the plant's identity. The collection numbers will never change, even if the names do. The names of *Phinaea multiflora* and *Phinaea albolineata* have not been changed.

A more dramatic change has occurred in the nomenclature of the *Saintpaulia* species. As a result of recent taxonomic studies, the African Violet Society of America now recognizes only nine true species, seven of which are currently in cultivation. In an attempt to simplify labels, The Gesneriad Society is testing a system of letters and numbers as abbreviations for the longer and more complex new names, as described in the last issue. The most radical change involves *Saintpaulia ionantha*, for example, which is now thought to consist of eight subspecies which have been further divided into thirty-four clones and varieties. It will take all of us a while to update our records and get comfortable with the new system.

When making donations to the Seed Fund, please list the date when you collected the seeds so we can keep track of how old they are. Age alone is no absolute indicator of viability as we are finding that some seeds of *Achimenes* and *Smithiantha*, as well as *Sinningia*, have a long shelf life when properly collected and stored. Some of the "new" listings are actually old collections that still have a good percentage of viable seeds. On the other hand, we would appreciate hearing from you if you fail to have any germination from a variety. If several members have the same problem, we can focus our viability testing on those seeds. The Fund is now too large for us to do frequent testing of all varieties.

Recent donations from the following are gratefully acknowledged: Marilyn Allen, Betsy Branson, Ruth Coulson, Ray Coyle, Ginny Heatter, Michael Kartuz, Charles Lawn, Jon Lindstrom, Leong Tuck Lock, Carolyn Ripps, Fran Russom, Peter Shalit, the Atlanta Botanic Garden, and the Marie Selby Botanical Gardens.

Send orders for species seed to:

Carolyn Ripps, 21 Sprain Road, Hartsdale, NY 10530

Seed Packets — \$2.00 each

- Please**
- To pay by credit card, send your credit card number, expiration date, and signature, and indicate if the card is Mastercard or Visa (\$6.00 minimum)
 - Make checks payable to the The Gesneriad Society in U.S. funds
 - Provide a self-addressed, stamped envelope (non-U.S. orders will have the postage added to their credit card bill)
 - List alternate choices
 - Include your membership number (first number on your mailing label)

- Note**
- There is a limit of one seed packet of a single variety per order
 - There is a limit of 25 seed packets per order
 - There is a household limit of 50 seed packets per calendar year

Seed Fund – Species

Achimenes (D)

admirabilis

- *candida* (B)
- cettoaana* (B)
- erecta* (B)
- erecta* 'Tiny Red' (F,L)
- *grandiflora* 'Robert Dressler' (B)
- longiflora* (B)
- longiflora alba* (B)
- mexicana* (B)
- skinneri* W1897 (B)

Aeschynanthus (B)

- batakiorum*
- *boschianus*
- evrardii*
- fecundus* SEL1974-2907-A
- fulgens* USBRG82-271
- *garrettii* (B)
- gracilis* 'Pagoda Roof'
- *hartleyi*
- humilis* USBRG94-214
- hosseusii*
- lobbianus* 'Radicans'
- longicalyx*
- longiflorus*
- *musaensis*
- parvifolius*
- sp. MSBG87-162
- sp. Cameron Highlands
- sp. Mt. Batupasak HW12587
- sp. (red) / Philippines
- sp. (like slender *longicalyx*)

Agalmyla

- *parasitica* HW12714/Mt. Salak (B)

Alsobia (B)

dianthiflora

Amalophyllon (D,H,L)

divaricatum (*Phinea divaricata*)

- *rupestre* RM2006-1 /Belize

Anodiscus (see *Gloxinia*)

Besleria

- comosa* JLC9931 (T)
- laxiflora* GRF9675 (M)

melancholica (MT)

cf. *divaricata* JLC5629

- sp. GRF9783 (orange w/yellow base)
- sp. GRF97108 (orange)
- sp. GRF97141 (orange)
- sp. GRF9853 (yellow)
- sp. GRF98139 (orange)
- sp. JLC5705
- sp. JLC6113

Boea

- *hygroscopica*

Briggsia (A,R)

- *aurantiaca*
- musciicola*
- species #2

Chirita

- caliginosa* (LM)
 - *eburnea* (blue) (F,R)
 - flavimaculata* USBRG94-085 (R)
 - *gemella*
 - *hamosa* (F,M)
 - involutrata* (F,L)
 - *involutrata* (dark blue)
 - lavandulacea* (LM)
 - *longgangensis*
 - *lutea* (formerly *C. eburnea* yellow) (F,R)
 - micromusa* (F,L)
 - *pumila* (F,L)
 - *pumila* USBRG2000-18 (F,LM)
 - *sericea* (L,R)
 - *spadiciformis* (L,R)
 - *subrhomboidea* (F,R,L)
 - tamiana* USBRG98-080 (F,R,P)
 - *viola*
 - species (Thailand)
 - species (blue) from Phuket
- ### *Chrysothemis* (F,LM)
- friedrichsthaliana*
 - *pulchella* (Ecuador)
 - villosa*
- ### *Codonanthe* (B)
- crassifolia*

crassifolia 'Cranberry'
devosiana (*digna*)
devosiana (*digna* 'Moonlight')
devosiana (*paula*)
devosiana (pink) MP0018
devosiana SEL 1997-0120A

- *erubescens* ABG 89-0836 (B)
- gracilis*
- gracilis* 'Kautsky Red Leaf' MP0016
- *venosa*

Columnea (B)

ambigua (*Trichantha*) 'El Yunque'
 WEK96163
angustata (*Pentadenia*)
arguta
brenneri JLC9833
byrsina (*Pentadenia*) (L)
citriflora (*Trichantha citrina*)
crassicaulis (*Pentadenia*)
crassifolia

- *dodsonii*
- eburnea* (*Dalbergaria*)
- erythrophaea* 'Breedlove'
fawcettii
- *filamentosa* (*Trichantha filifera*)
 JLC6500
- flexiflora* (*Trichantha dodsonii*) (LM)
- glicensteinii*
- hirta*
- *inaequilatera* (*Dalbergaria*) JLC6072
- *linearis*
- maculata*
- *oerstedia*
- orientandina* (*Pentadenia*) (LM)
- ornata* (*Dalbergaria*) GRF2665
- oxyphylla*
- polyantha* (*Dalbergaria*)
- purpusii*
- sanguinea* (*Dalbergaria*)
- sanguinea* (*Dalbergaria*) 'Orange
 King' GRF9492
- scandens* var. *fendleri*
- schiedeana*
- *scheideana* 'Huatusco' (yellow) (B)
- spathulata* (*Pentadenia*) GRF9503
 (LM)
- spathulata* (*Pentadenia microsepala*)
 W1837
- spathulata* (*Pentadenia zapotalana*)
- strigosa* (*Pentadenia*) GRF95154
- sulfurea*
- *tandapiana*

Corytoplectus

cutucuensis (L)
cutucuensis GRF9794
speciosus JLC9969

Crantzia

tigrina

Cyrtandra

cupulata (G,H,MT)
 • sp. (white) /Java (T)

Dalbergaria (see *Columnea*)

Diastema (D,F,P)

affine JLC9964
racemiferum JLC9824
vexans

Didymocarpus

- *cordatus* (G,T)
- *sulfureus*

Drymonia

affinis GRF98109
chiribogana
coccinea GRF9873
coccinea JLC9980 (T)
coccinea var. *fusco-maculatus*
 • *conchocalyx* 'Silver Lance' (T)
doratostyla GRF9674 (B)
hoppii JLC9863
macrophylla (M)
mortoniana (L)
pulchra GRF98113
rhodoloma ABG 90-0528
serrulata (B)
serrulata GRF9752
strigosa (B)
 • cf. *ecuadorensis* JLC6185
 sp. (*umecta* ined.) (B)

Episcia (H,L,B,F)

- *xantha*
- *cupreata*

Epithema

sp./N. Perak (M)
 sp. (blue) /N. Perak (M)

Gasteranthus

- *atratus*
- *calcaratus* JLC9867
- *villosus* JLC9620
- *wendlandianus* JLC9868 (H,M)

Gesneria (H,F)

acaulis (M)
christii
citrina
 • *cuneifolia* (L)
 • *cuneifolia* 'Quebradillas' (L)
cuneifolia 'Tom Talpey' (H,F,L)
humilis
pedunculosa USBRG97-102 (S,T)
 • *rupincola*
ventricosa (M)

Glossoloma (*Alloplectus*)

bolivianum USBRG95-140 (M)
ichthyoderma JLC9836 (T)
 sp. aff. *panamense* GRF9781
 (orange)
 sp. aff. *purpureum* USBRG98-030
 sp. aff. *schultzei* GRF97103

- Gloxinella (Gloxinia)** (D)
lindeniana (F,L)
- Gloxinia** (D)
perennis (LM)
perennis 'Insignis' (L)
xanthophylla (*Anodiscus*) (M)
- Gloxiniopsis (Gloxinia)** (D)
racemosa (L)
- Haberlea** (A,R)
rhodopensis
- Hemiboea** (D)
 - strigosa*
 - subcapitata* (L)
- Henckelia**
 - albomarginata* (H)
 - hispida* (H)
 - incana* (H,P)
 - malayana* (H,M)
 - sp. LTL0406 (LM,R)
- Heppiella** (D)
ulmifolia GRF98172
- Kohleria** (D)
allenii (T)
hirsuta
peruviana
spicata (M)
- Monophyllaea**
horsfieldii (U)
- Monopyle**
macrocarpa GRF94123
- Moussonia** (M)
deppeana
 - elegans*
 - elegans* GRF9407
- Nautilocalyx**
adenosiphon
 - mellitifolius*
- Nematanthus**
albus (sp. "Santa Teresa") (B)
australis (B)
 - brasiliensis*
 - fissus* GRF9938
 - fluminensis*
 - fornix*
 - fritschii*
 - punctatus* MP0052
 - sericeus* (B)
 - strigillosus* 'Ibitioca' (B)
 - wettsteinii* (B)
- Neomortonia**
nummularia
rosea (P,H)
- Nomopyle**
 - dodsonii* (*Gloxinia*) JLC9645
- Orchadocarpa**
 - lilacina*
- Opithandra**
 - primuloides*
- Ornithoboea**
wildeana (LM)
- Paraboea**
 - capitata*
 - sp. (green leaf)
- Paliavana** (S,T)
prasinata
prasinata GRF732
 - plumerioides* (Cabrál)
 - tenuiflora*
- Paradrymonia**
 - ciliosa*
 - decurrens* (L)
 - sp. JLC5731 (F,P)
- Pearcea**
sprucei JLC9962 (H,M)
- Pentadenia** (see *Columnnea*)
- Phinaea** (D,F,P)
albolineata
multiflora 'Tracery'
- Primulina**
 - tabacum* (F,L,R)
- Ramonda** (A,R)
 - myconi*
 - myconi* —
white
lavender
pink
 - clone G
- Rhynchoglossum** (H,L)
gardneri
- Rhytidophyllum** (G,H,S,T)
auriculatum
tomentosum
villosulum
- Ridleyandra**
 - morganii*
 - quercifolia*
- Rufodorsia** (F,LM)
 - minor*
- Saintpaulia** (F,R)
3. *shumensis*
 - 5a. cl. *grandifolia* No. 299
 - 5b. cl. *difficilis* Mather No. 2
 - 5b. cl. *grotei* Protzen
 - 5b. *grotei* cl. Silvert (F,L,R)
 - 5c2. cl. *diplotricha* Punter No. 7
 - 5f. cl. *orbicularis*
 - 8. *rupicola* cl. Cha Simba
- Seemannia (Gloxinia)** (D)
 - purpurascens* (Bolivia) (M)
 - gymnostoma* (LM)
 - nemantanthodes*
 - sylvatica*
- Sinningia** (D)
 - aggregata* (M)
 - aggregata* 'Pendulina' (D)
 - aghsensis* (T)

- aghensis* AC2356
allagophylla (MT)
allagophylla GRF9922
allagophylla GRF9929
allagophylla GRF9968
allagophylla (yellow)
- *amambayensis* (L)
 - *araneosa* (F,L)
 - *brasiliensis* (M)
brasiliensis 'Verde'
brasiliensis AC1314
bulbosa (T)
calcaria MP891 (F,L)
canescens (D,LM)
carangolensis (M)
cardinalis (F,LM)
cardinalis (compact) (F,LM)
cardinalis (dark calyx) (LM)
 - *cardinalis* (orange)
cardinalis peloric mix
cardinalis (pink)
cardinalis 'Innocent'
 - *cardinalis* 'Skydiver' (LM)
cochlearis
 - *concinna*
conspicua (F,L)
conspicua GRF 9942
cooperi (LM)
cooperi AC1522 (M)
curtiflora (T)
curtiflora GRF9927
defoliata
douglasii GRF91188 (LM)
douglasii GRF9936 (LM)
elator AC1409 (M)
elator GRF9963
eumorpha /Saltao (L)
eumorpha (lavender) (F,L)
eumorpha (pink)
eumorpha (white)
gigantifolia
glazioviana (L)
 - *guttata* (LM)
harleyi MP 482
hatschbachii (L)
hatschbachii 'Iporanga' (D,LM)
 - *hirsuta*
iarae (F,L)
 - *incarnata* (S,MT)
insularis (LM)
leopoldii (F,L)
leucotricha (F,L)
 - *leucotricha* (pink)
leucotricha cv. 'Max Dekking' (M)
lineata (LM)
lineata GRF9920 (LM)
lineata (highly spotted)
macrophylla
macropoda (M)
- macrostachya* (LM)
magnifica GRF91121 (pink) (LM)
magnifica GRF91134 (red)
- *mauroana* (D,M)
micans MP891 (LM)
nivalis AC1460 (L)
nordestina
piresiana (L)
polyantha (formerly sp. "Waechter") (L,M)
 - *pusilla* (F,P)
 - *pusilla* (Itaoca) (F,P)
 - *pusilla* 'White Sprite' (F,P)
reitzii (M)
reitzii 'New Zealand'
sceptrum (T)
sceptrum AC2406 (T)
sellovii (MT)
sellovii GRF9919
sellovii 'Bolivia' USBRG96-003
 - *sellovii* 'Purple Rain'
 - *speciosa* 'Cabo Frio' (F,L)
speciosa 'Carangola'
speciosa 'Domingos Martins'
 - *speciosa* 'Lavender Queen'
speciosa 'Regina'
speciosa 'Sao Conrado'
speciosa AC1652
 - *speciosa* AC1503
sulcata (LM)
tubiflora (S,MT)
tuberosa
warmingii (T)
warmingii GRF9921
 sp. aff. *aggregata* (yellow) (M)
 sp. aff. *aggregata* / *Ilhabela* MP 631
 - sp. aff. *reitzii* 'Black Hill' (M)
 sp. aff. *reitzii* GRF9914 (magenta)
 - sp. aff. *warmingii* 'Esmeril' (L)
 - sp. "Florianopolis" (L,M)
 - sp. "Gertiana"
 - sp. "Globulosa"
 - sp. "Ibitioca" (LM)
 sp. "Rio das Pedras" MP1094 (F,P)
 - sp. "Rio das Pedras" dark (F,P)
 sp. "Rio das Pedras" (light) (F,P)
 sp. "Santa Teresa" (D,P,F)
 mixed species
- Smithiantha*** (D,FM))
- *canarina* GRF9105
 - *multiflora* GRF9121
 - *multiflora* GRF9122
 - *zebrina* GRF9104
- Streptocarpus***
- *buchananii* (B)
 - *candidus* (F,R)
 - *confusus* (U)
 - *confusus* ssp. *confusus* /Swaziland
cooksonii (dark purple)

- cooperi* (U)
- cyanandrus* (F,P)
- *cyaneus* (blue) (R)
- *cyaneus* (blue/long corolla)
- *cyaneus* (lilac)
- daviesii* (F,U)
- denticulatus* (U)
- *dunnii* (U)
- eylesii* (U)
- fanninia* (R)
- fasciatus* (R)
- fasciatus* /Krokodilpoort,
E. Transvaal (R)
- floribundus* (R)
- formosus* (R)
- formosus* /E. Cape, Transkei
- galpinii*
- gardenii* (F,L)
- glandulosissimus*
- goetzei* (U)
- grandis* (U)
- grandis* (blue form)
- grandis* ssp. *grandis*
- haygarthii* (F,U)
- *haygarthii* JT04-03D/Transkei Coast
(F,U)
- haygarthii* JT04-051/Inchanga (U)
- haygarthii* /Mkambati, Transkei (U)
- holstii* (B,L)
- johannis* (F,R)
- johannis* /Komga, E. Cape
- johannis* /Weza, S. Natal (R)
- sp. aff. *johannis* (F,R)
- kentaniensis*
- *kentaniensis* (N. Kei River)
- kirkii* (F,L)
- *kunhardtii*
- *lilliputana*
- *meyeri* /SE Transvaal (R)
- meyeri* /NE Cape Province
- modestus* (R)
- *modestus* /Magwa Falls, Transkei (R)
- molweniensis*
- mucosus* (L)
- nobilis* (M)
- pallidiflorus* (F,LM)
- parviflorus* (R)
- parviflorus* (mauve)
- *parviflorus* (white) (R)
- parviflorus* (white/mauve)
- *parviflorus* ssp. *parviflorus* /Limpopo
Province
- pentherianus* (F,L)
- polyanthus* (F,L)
- polyanthus* subsp. *comptonii*
- polyanthus* subsp. *dracomontanus*
- polyanthus* subsp. *polyanthus* /lg fl
- polyanthus* subsp. *polyanthus* /Valley
of 1000 Hills, Natal
- porphyrostachys* (U)
- primulifolius* (F,R)
- primulifolius* /Valley of 1000 Hills
- prolixus* (F,U)
- pumilus* (F,P)
- *pusillus* JT04-02C (P)
- rexii* (white)
- rexii* (pale blue/long corolla)
- rexii* (white/blue mix)
- rimicola* (F,P)
- roseoalbus* (F,R)
- saundersii* (U)
- saxorum* (B)
- thompsonii* (B,L)
- trabeculatus* (U)
- *vandeleurii* (U)
- variabilis* (F,R)
- wendlandii* (U)
- wilmsii* (U)
- wilmsii* /Long Tom Pass (U)
- Titanotrichum***
- oldhamii* (propagules)
- Tremacron***
- *aurantiacum* (R)
- Trichantha*** (see *Columnnea*)
- Vanhouttea*** (S,T)
- *brueggeri*
- lanata*
- *pendula*
- Mixed alpine gesneriads**
- Mixed gesneriad species**
- Limited quantities available. Packet may contain small amount of seed

Seed Fund Key

- | | |
|--|--|
| <ul style="list-style-type: none"> (A) Alpine or cool greenhouse (B) Suitable for hanging basket (D) Has dormant period, forming tubers or rhizomes (F) Blooms readily in fluorescent light (G) Recommended for greenhouses; requires space (H) Requires humidity and warmth (L) Low growing; not more than 12" | <ul style="list-style-type: none"> (LM) Low to medium height (M) Medium height; 1 to 2 feet (MT) Medium to tall (P) Petite or miniature; under 6" (R) Rosette in form (S) Requires sun to bloom (T) Tall plants; generally over 3 feet (U) Unifoliate or single leaf (V) Leaves may be variegated |
|--|--|

The Genus *Episcia*

Laurence E. Skog & Jeanne Katzenstein

Episcia is a popular neotropical genus in widespread cultivation with six of the ten species and hundreds of cultivars being grown worldwide. *Episcias* typically boast beautifully patterned foliage in various shades of green, copper, and mahogany. The veins are often pale green or silver providing interesting contrasts. Less commonly, the leaves may be plain green. Flowers may be red, orange-red, yellow, white, pink, blue, or lavender. *Episcias* demand warmth and will be damaged or killed if the temperature falls below 55°F (13°C). Extra humidity encourages bloom. Although they require constant moisture, perfect drainage is essential. These fibrous-rooted gesneriads are especially suited to hanging basket culture because of the numerous stolons, or runners, they typically bear. They are also frequently grown in wide pans or flying-saucer-shaped clear plastic enclosures. *Episcia* sports with pink foliar variegation tend to be more delicate and usually do better in a closed container. Here is a more complete picture of the genus.

Establishment of the Genus: *Episcia* Mart., Nov. Gen. Sp. Pl. 3: 39 (Jan.-June 1829).



Original 1829 illustration of *Episcia reptans*
by Martius in Nov. Gen. Sp. Pl. 3: 41, pl. 217

Etymology (history of the word): The name comes from the Greek *επι*, *epi* = on, upon; and *σκια*, *skia* = shadow, in reference to the shady habitat where the plants are usually found in nature.

Synonyms: *Episcia* Mart. Sect. *Episcia* subsect. *Trematanthera* Leeuwenb. (1958), *Cyrtodeira* Hanst. (1854).

Placement of the Genus: Family Gesneriaceae, subfamily Gesnerioideae, tribe Episcieae.

Geographical Distribution: From tropical South America to Nicaragua and the Guianas.

Habitat: In tropical forests, in damp places, on slopes, banks or rocks, usually at low elevations, often forming large colonies.



Episcia xantha growing in a typical groundcover habitat in French Guiana (photo by Christian Feuillet)



Episcia and other plants growing in a shaded pocket of soil in Venezuela (photo by G. Bunting)

Habit: Stoloniferous, terrestrial, or saxicolous herbs. Stems creeping, rooting at nodes, branching by the regular production of stolons. Leaves opposite, the lower pair with axillary stolons, upper pairs crowded, bearing the flowers in their axils; petioles short; upper surface of the blades dark green or with various patterns of variegation, lower surface often colored. Cymes of 1-6 axillary flowers, peduncles slender. Sepals green or colored, free or shortly joined at the base, upper sepal forced back around the corolla spur. Corolla white, yellow, blue, lavender, or red, inserted horizontally in the calyx, zygomorphic, salverform to campanulate, conspicuously spurred, contracted above the spur and at the throat, rarely ventricose, limb oblique, lobes spreading, rounded, entire, their margins minutely toothed or fimbriate. Stamens 4, didynamous, included; filaments nearly straight, attached to the corolla base, after anthesis depressed or coiling; anthers coherent in pairs or in a square, becoming free, dehiscing by a longitudinal slit. Nectary a single large, dorsal gland. Ovary superior; stigma stomatomorphic, bilobed, or capitate. Fruit an ovoid, bivalved, fleshy capsule.

Pollinators: Unknown, but probably insects or hummingbirds.

Chromosome number: $2n = 18$.

Number of Species: 10 (see list of species starting on page 17).

Type Species: *Episcia reptans* Mart.

Earliest Illustrations: 1829: *Episcia reptans* Martius, Nov. Gen. Sp. Pl. 3, t. 217, original illustration; 1847: *Episcia cupreata* Hanstein, Bot. Mag. pl. 4312 (as *Achimenes cupreata*); 1857: *Episcia reptans* Martius., J., Hort. Prat. Belgique, pl. 9 (as *Tapina splendens*).

Common names: flame violet, peacock plant, carpet plant.

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Kriebel H., R. 2006. Gesneriáceas de Costa Rica – Gesneriads of Costa Rica. 372 pages. INBio: Heredia, Costa Rica.

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Wiehler, H. 1978. The genera *Episcia*, *Alsobia*, *Nautilocalyx*, and *Paradrymonia*. Selbyana 5: 11-60, rev.



Episcia reptans illustrated in 1857 as *Tapina splendens* in J. Hort. Prat. Belgique, pl. 9

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Episcia Species

Laurence E. Skog & Jeanne Katzenstein

The ten known species of *Episcia* are described below. Only *E. cupreata*, *fimbriata*, *lilacina*, *reptans*, *sphalera*, and *xantha* are or have been in cultivation.

Episcia andina Wiehler 1984. *Selbyana* 7(2-4): 332, pl. 1D.

This species is known only from the type locality in the central part of Colombia. The ovate to elliptic leaves are plain green and not hirsute on either surface. This little-known species with red corollas can be distinguished from *Episcia reptans* and *E. cupreata* by its non-bullate (plane) and sericeous (not hirsute) leaves as well as its calyx lobes and corolla tubes that are not hirsute. (andina = the Andean mountain range in which it was found)

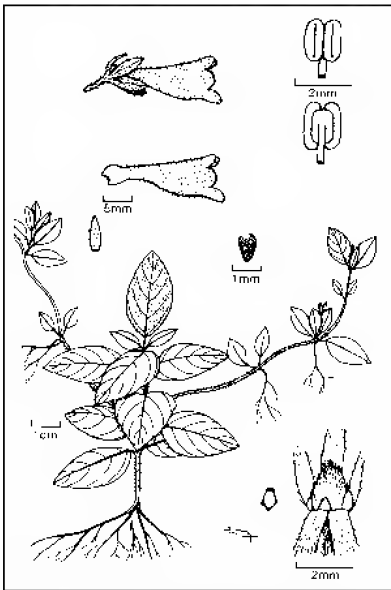


Illustration of *Episcia andina* from *Selbyana* 7 (2-4): 332, pl. 1D (1984)

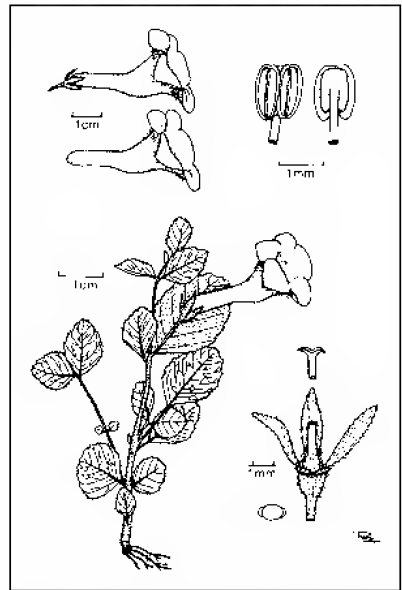


Illustration of *Episcia prancei* from *Selbyana* 7 (2-4): 333, pl. 2A (1984)

Episcia cupreata (W. Hooker) Hanstein 1865. *Linnaea* 34: 340.

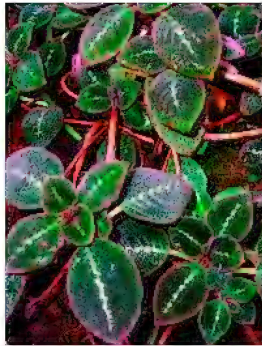
The first plants now known as *Episcia cupreata* had deep coppery-green leaves unmarked by prominent veining. They were introduced to Kew Gardens in England as seed from New Grenada (now Colombia) in 1845 followed by other forms from Colombia with both plain green and patterned leaves. The type with plain green leaves was designated *Episcia cupreata* var. *viridifolia*. Other leaf types may have metallic or light green veining on a darker background or have a dark edge to the leaf. The plants are hairy with a short central stem and have reddish to green stolons.

Although the leaves may vary, all have flowers of the same form. The sepals are not toothed. The short corolla tube is curved, orange-red in color with the inside of the throat yellow with red spots. The corolla limb is at an oblique angle to the tube with the upper lobes bending back and the lower lobes projecting forward. The lobes are rounded, not noticeably toothed. The sterile variety, *Episcia cupreata* 'Tropical Topaz' (introduced from Panama where it was being grown in cultivation), has plain green leaves and clear yellow flowers.

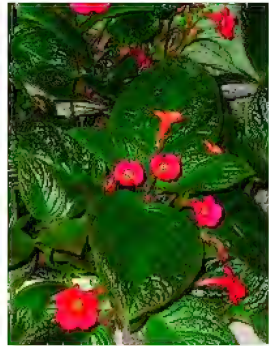
Plants of this species are probably only truly native to Colombia and perhaps Venezuela. Collections made in other tropical American countries (e.g., Brazil, Ecuador, El Salvador, Nicaragua, and Panama) are either from gardens or plants likely escaped from cultivation. *Episcia cupreata* was originally published as *Achimenes cupreata* (1847), but has also appeared as *Cyrtodeira cupreata* (1854) and *Tapina splendens* (1857). (cupreata = copper colored)



Episcia cupreata



Episcia cupreata
'La Solidaridad Bronze'



Episcia cupreata
var. *viridifolia*

Episcia duidae Feuillet 2008. *J. Bot. Res. Inst. Texas* 2: 275.

This species from Amazonian Venezuela most closely resembles *Episcia reptans* in its reddish flowers. However this new and rare species differs from *E. reptans* by having smaller vegetative parts and densely appressed-pubescent leaves. Also, *E. duidae* has large papillae in the upper third of the corolla tube, while *E. reptans* has a ring of glandular trichomes in the corolla throat. The name refers to the locality where the type specimens were found, Mt. Duida in southern Venezuela.

Episcia fimbriata Fritsch 1906. *Bot. Jahrb. Syst.* 37: 484.

The leaves are small, narrow, pointed, green with a tree-like pattern in the center, and the white corollas are fringed as in *Alsobia dianthiflora*. Plants were introduced into cultivation in the U.S. from seed collected by H.E. Moore in Peru in 1961.

This species is native to Brazil, Colombia, Peru, and perhaps Venezuela. Several leaf forms exist: the type of *Episcia fimbriata* has leaves marked with purple and brown; the cultivar *E. fimbriata* 'Dudley's Silver' (also from Peru) has a broad silver mid-vein. Other named cultivars include *E. fimbriata*

'Maas's Bronze' (from Brazil) with soft velvety leaves shaded bronze and *E. fimbriata* 'Moore's Green' (from Peru) with plain green leaves without a silver mid-vein. (fimbriata = fringed)



Episcia fimbriata
'Panama White'



Episcia fimbriata
'Blue Heaven'



Episcia fimbriata
'Dudley's Silver'

Episcia lilacina Hanstein 1865. *Linnaea* 34: 342.

This species is hairy with a short central stem and numerous red or green stolons. The leaves are shortly petioled with elliptic to ovate blades 1-4 inches long. There are several leaf variations. The original type had dark bronze-green leaves with a herringbone pattern of light green. There are other forms with coppery leaves without patterns and light green leaves, with or without silver patterns. Collections of this species made in Panama by Hans Wiehler in the 1970's reveal different flower colors and other leaf variations.

The long narrow corolla tube is straight, and the notched limb is larger than that of *Episcia cupreata* or *E. reptans*. The corolla is pale lavender, and



Episcia lilacina 'Blue Nile' (photo by Michael Riley)

the throat has a pale yellow patch. The throat opening is laterally compressed, not round as in the first two species. At the base, the tube has a prominent spur half as long to nearly as long as the calyx-lobes. It is not as free blooming as the red-flowered species.

Episcia lilacina reached England late in the 1860's where it was named *Cyrtodeira chontalensis* after the region in Nicaragua from which it had come. This species is also native to Costa Rica and Panama. *Episcia lilacina* has been published as *Cyrtodeira chontalensis* (1867), *Episcia fendleriana* (1891) and *Episcia acaulis* (1916). (lilacina = lavender)

Episcia prancei Wiehler 1984. *Selbyana* 7: 333, pl. 2A.

This species is known only from the type locality in northeastern Brazil. *Episcia prancei* is apparently closely related to *E. fimbriata* but differs by its lavender color, the entire corolla lobes (unfringed), and the glabrous corolla tube. (prancei = named for its discoverer, Dr. Ghillelan T. Prance of the New York Botanical Garden and the Royal Botanic Gardens, Kew)

Episcia reptans Mart. 1829. *Nov. Gen. Sp. Pl.* 3: 41, pl. 217.

This species can be distinguished from the similar *Episcia cupreata* by several characters. *E. reptans* has toothed sepals; the corolla is deep red and has pink in the throat with obscure lines but no spotting; the tube is longer and straighter; the limb is at right angles to the tube; the lower lobes are somewhat cupped and toothed on the edges. The leaves are deep bronze-green with a narrow pale green or silvery pattern on the midrib and lateral veins. The cultivar 'Lady Lou', the first one to show albino leaf patches, is a sport of *E. reptans*.

Plants of this species are native to Brazil, Colombia, Ecuador, Guyana, Peru, and Venezuela. *Episcia reptans* was also published as *Cyrtodeira fulgida* (1873) and *Episcia fulgida* (1874). (reptans = creeping)



Episcia reptans
(green-leaf form from Venezuela)



Episcia reptans 'Iquitos'
(from Peru)

Episcia rubra Feuillet, 2008. *J. Bot. Res. Inst. Texas* 2: 277, fig. 2.

This recently described rare species from Amazonian Venezuela is not in cultivation but can be distinguished from its nearest related white-flowered species, *E. fimbriata* and *E. sphalera*, by its red corollas. The species also has short 2-3 mm long calyx lobes. (The name refers to the red corolla color)



Episcia sphalera (grown and photographed by Kenji Hirose)



Episcia xantha (grown at Longwood Gardens)

Episcia sphalera Leeuwenb. 1958. *Acta Bot. Neerl.* 7: 310, 413, fig. 27.

The leaves can be very variable in size and are a vivid medium green above and paler beneath, covered with stiff hairs on both sides. The sepals are green and hirsute on both sides. The corolla is short and white (occasionally mauve?) with short-fringed lobes. The stolon size varies greatly (from 1 inch to over 10 inches) depending on growing conditions.

This species is native to Brazil, French Guiana, and Suriname. It was first described in 1958 but was not brought into cultivation in the U.S. until 1994 when a colleague of Christian Feuillet's (traveling in French Guiana at the same time) collected the species and gave it to Christian to take back to the Smithsonian. (*sphalera* = fallacious or false, alluding to its similarity to *E. cupreata*)

Episcia xantha Leeuwenb. 1980. *Misc. Pap. Landb. Wageningen* 19: 241.

The leaves are dark green and bullate (quilted). The pale yellow corolla has 4-5 red spots as a nectar guide in the throat. This species is native to French Guiana and Guyana. (*xantha* = yellow in Greek)

Cover Photographs

Episcia cupreata
(photo by Michael Riley)

Episcia xantha (grown and photographed by Toshijiro Okuto)

Episcia sphalera
(photo by Christian Feuillet)

Episcia fimbriata (grown and photographed by Mauro Peixoto)

Episcia reptans (variety found growing in Brazil)

Episcia lilacina
(photo by John L. Clark)

Two New *Episcia* Species from Venezuela

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In the 1990's, after Julian Steyermark's death, Larry Skog was asked to prepare the treatment of the Gesneriaceae for the Flora of the Venezuelan Guayana. This was a huge project started by Steyermark to publish identification keys, short descriptions and a fair number of drawings for all the flowering plants of the Venezuelan states of Amazonas, Bolívar and Delta Amacuro — the part of Venezuela situated east of the Orinoco River. Larry had published several species from the Venezuelan Guayana with or without Steyermark, so he was an obvious choice. Unfortunately Larry did not have the time to do it as he was involved in too many other projects and he suggested that I do it. Soon after, I received a mountain of herbarium specimens to work on and the manuscript notes of Steyermark's observations. Several specimens represented species that were not yet described, and among them were two new species of *Episcia*. The two new species were collected in the Venezuelan state of Amazonas. I have not seen them alive and, as far as I know, they are not in cultivation.

Episcia duidae, named after Cerro Duida, resembles *E. reptans* by its flowers, but differs from it by its smaller vegetative parts and densely appressed-pubescent leaves. When the petiole and the base of the stolons are young, their hairs are red. It is a stoloniferous herb forming mats among rocks. The whole plant is covered with long, multicellular, gland-tipped hairs. The leaves are small, 2.0–4.5 × 1.4–2.5 cm, with long, appressed, yellow hairs on both surfaces, except above on the main veins that show their dark green color. Inflorescences carry 1–4 flowers; the corollas, held transversal in the calyx, are crimson, the tube is 15–18 mm long, densely pubescent outside with appressed hairs, the lobes are serrulate, 7 × 4 mm, glabrous on both sides except at the very base where joining the tube. The fruits are globose capsules 4.5–5 mm long.



Episcia duidae herbarium specimen (photo by Christian Feuillet)

Episcia duidae has been collected on Cerro Duida (Munic. Alto Orinoco) and Serranía Parú (Munic. Atures) in the state of Amazonas (Venezuela) between 1500 and 2000 m in elevation. It was found at the base of waterfalls and in wet crevices. Flowers have been seen in February, March and November, and fruits in February.

In section *Episcia*, *Episcia duidae* resembles the red-flowered species: *E. cupreata*, *E. reptans* and the poorly known *E. andina*. The most visible differences are that the tube of the corolla is straight in *E. duidae*, clearly curved in *E. cupreata*, funnel-shaped in *E. andina* and much longer in *E. reptans*.



Episcia rubra discovered and photographed in Venezuela by Bruce Holst in 1987

Episcia rubra, = red (corolla), has stamens opening only in the basal half of the anthers, not the whole length. This character places it in section *Trematanthera* with *E. fimbriata* and *E. sphalera*. They are similar vegetatively, but *E. rubra* differs from the other two by its red corollas. The plants are herbs with stolons and are hirsute. The inflorescences carry 1–4 flowers. The corollas, held oblique in the calyx, are crimson; the tube is 1.2–1.6 cm long, with scattered hairs outside; the lobes are suborbicular, 3 × 4 mm, serrulate. Only young fruits were observed, they are subspherical, 3.5 mm in diameter, hirsute with yellowish hairs.

Episcia rubra has been collected only once in crevices in a moist, shaded, rocky canyon along a tributary of Río Coro-Coro (Amazonas, Venezuela), around 200 m in elevation. Flowers and young fruits have been seen in February.

Relevant Literature:

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Episcia sphalera, *E. xantha*, and *E. cupreata*

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Among the six species of *Episcia* I currently grow are *E. cupreata*, *E. sphalera*, and *E. xantha*. They are quite distinct from one another and demonstrate a wider variety of growth habit and leaf type in this small genus than one who only grows hybrids might expect.

Episcia sphalera is native to northeastern Brazil, French Guiana, and Suriname. The average temperatures in those areas range from about 79–85°F (26–29°C) all year long with slightly cooler nights, so if we didn't already know that Episcias like it warm, this would be a good indicator. Note that northeastern Brazil, the area with the lowest rainfall, averages 78" (2000 mm) per year – about twice as much as Seattle so, yes, Episcias from this area like it moist, too.

I find *Episcia sphalera* to be one of the easiest Episcias to grow well because of its tidy habit; it makes lots of stolons, but instead of looking stringy, it forms a pleasing mound of bright green, heavily quilted leaves. It would be great to achieve that habit in a hybrid with flashier leaves but, alas, *E. sphalera* is stingy with its blossoms. It has never bloomed for me.

Episcia xantha comes from an area similar to that of *E. sphalera* but looks very different with its big brown leaves and long hairs that are sparse enough for the shiny surface of the leaf to peek through. Because the leaves grow so large and because it is fairly generous with its yellow flowers, it can be quite an attractive plant, even if brown isn't your favorite leaf color for plants. Possibly because of its limited range, *E. xantha* is the most cold-sensitive of the Episcias I have ever grown. One especially cold winter night when the greenhouse heaters couldn't keep up, the temperature dipped below the magic 55°F (13°C). Several of my Episcias were damaged, but *E. xantha* was dead, dead, dead.



Episcia sphalera
(photo from Society archives)



Episcia xantha fleshy capsule with seeds (plant grown by Nancy Kast; photo by Jeanne Katzenstein)

The *Episcia xantha* I'm currently growing was from The Gesneriad Society Seed Fund, as is my *E. cupreata*. Episcias are easy to grow from seed, and I've had good germination with the lots I've gotten from the Society. (But since I haven't mastered pollinating Episcias, it may be a while until I can pay back my seed debt.) Since I really love *E. xantha* for its unusual appearance and willingness to bloom (I'll get you yet, *Episcia sphalera*!), I was happy to reorder the seed and start again. It's a gesneriad I especially enjoy having in my collection.

Episcia cupreata is found in a larger geographical area than the two previous species. It grows in (but may not be native to) Brazil, Colombia, Ecuador, El Salvador, Nicaragua, Panama, and Venezuela. Perhaps that accounts for its much greater variability; two plants in the same pot can look different. I suspect there's more genetic diversity in this species due to its wide distribution (there are many variants, some of which I also grow), and it may also be that the Seed Fund's stock was drawn from a wider range of plants than that of *E. xantha*. Nevertheless, *E. cupreata* does respond to different amounts and quality of light in the same way that hybrids do. It changes. Under some conditions, the very large leaves are coppery, as the name would suggest; and under other conditions they are darker and redder. I'll hang a basket of it on the porch this summer to see what I get outdoors. No matter what color the leaves turn, the brilliant orange-red flowers should make a nice display.

The dead-easiest way to grow Episcias is in a terrarium, and that's where my biggest plant of *E. cupreata* is right now – along with a Madagascan tomato frog and crickets that are not averse to munching on the occasional Episcia. So, maybe there are no show plants in there, but it's a good way to make room for backup stock in case something untoward happens to my other plants.

Most of my Episcias are grown indoors under T8 lights that are on 12 hours per day, on capillary matting with wicks to insure good contact. I use a

potting mix of two parts Fafard #2 (a peat-based soilless mix), one part perlite, and one part shredded New Zealand sphagnum moss.

As much as I love *Episcias*, they can be a bear to grow well. They are susceptible to all the usual gesneriad culprits, and mites seem to really love them. Despite what I think is good air circulation in my plant room, I'm having a lot of trouble with some unidentified fungi (yes, more than one!) so I've just purchased some Physan 20 to see if that will solve the problem. Now, if you can avoid those problems (and actually that's not so hard), *Episcias* grow really fast so they need to be groomed and repotted often to look their best – work that's not always easy to fit into a busy schedule. However, because they're so beautiful, I'm going to keep growing them even if they are often a bit bedraggled.

If you're only growing hybrid *Episcias*, of which there is a quantity approaching infinity, you're still missing some of the gems of this genus ... so add a species or two or all of them. You can leave out the frog.



Episcias and other gesneriads enjoying a terrarium habitat with a Madagascan tomato frog in the home of Carol Ann Bonner



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Episcias Among Others

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I came to an appreciation of the genus *Episcia* relatively recently in my life of growing plants. When after five or six years of growing an increasingly wide variety of exotic plants, I started to become aware of the large and incredibly varied group known as gesneriads. *E. 'Cleopatra'* was by far the one most often seen and talked about. Of course with four or more shades of white and pink on the leaves, the plant was a challenge to grow well. It seemed that to be raised well it needed pretty constant attention to prune off runners, assuming the single crown preference, as well as high humidity, and a requirement for at least a 12" diameter dome. Though undoubtedly sounding like sacrilege to some, the plant just didn't seem worth the trouble or the space. But then I've never been real big on *Saintpaulia* either, so it's clear from the start that I look at these plants a bit differently.

In the spring of 1992 I had the good fortune to be collecting plants in Costa Rica with a small group, most of whom were collecting frogs and invertebrates. Walking up streams and along streamsidess held the best possibilities for collecting organisms of interest to all of us. And so it was that one morning we were walking from one stream over to another, just a mile or so outside of BriBri. I was admiring a spike and collecting a few deep blue fruits from *Heliconia imbricata*, one of my favorites among the upright-flowering *Heliconia* species. Having noticed a specimen from a distance away, much as a hummingbird would be likely to, I had moved closer without paying much attention to what was underfoot (not the safest way to move about in the jungle). At one point I looked down, however, and noticed some wonderfully patterned leaves mixed in with the leaf litter – first just a few and then more and more. I suspected what it was even before I saw the first large lavender bloom winking up at me – *Episcia lilacina*. It was really neat to see, all around me, underfoot even. Between its strawberry-plant-like ability to spread by stolons and its typical growth on the forest floor, it easily



Episcia lilacina carpeting the forest floor in Costa Rica
(photo by Jonathan Ertelt)



Episcia lilacina blooming in Costa Rica (photo by Jonathan Ertelt)

earns one of its common names – carpet plant. And if this species was hard to flower, as rumors I had heard suggested, then I had caught this population at just the right time. Actually given the amount of vegetation it probably wouldn't be called extremely floriferous, but there were more than a dozen buds and blooms scattered throughout the large patch. The genus *Episcia* had found me, and I was hooked.

Well, I say I was hooked but I still don't collect the genus with a passion. There are very few genera that I do. But I do have several varieties and will be trying to acquire several more as my number of terraria increases. Yes, *Episcias* do tend to favor high humidity, though many growers may talk about wick-watering and plant shelves and having their plants out in the open. Growers find what works best for them. Show-stopping plants for one grower may well be dead plants for another grower trying to duplicate the first one's methods. But in general *Episcias* do like high humidity, and fairly bright light. Some sun is even all right for those that I grow, but I have found it preferable to have the sun filtered through other plants, or else grow them under fluorescent lights. In my conditions, whether in the greenhouse or under lights in a terrarium, the greener the leaves the more tolerant the plants are of higher light levels. At the same time, the plants I grow can tolerate lower light levels well. Keep in mind that I am not talking about the numerous cultivars with all their variations in patterns and colors. I grow species along with a few selected forms.

When I collected the *Episcia lilacina* in Costa Rica, it was growing in predominantly low light, but there was also dappled sunlight. The ground was moist, probably well drained, though it was also low-lying enough and close enough to the stream area that it could likely have been wet for extended periods during the rainy season. In pots, flats, and terraria I keep the soil moist, but well-drained and well-aerated. This is how I grow *Episcias*. And unlike the earlier collection of this species which did seem to be a shy bloomer, my collection blooms regularly several times a year with

large lavender flowers with a small yellow region around the keyhole opening.

Since they do well in terraria and I have several large terraria, *Episcias* fill a groundcover niche in my own collection. Last summer I received a piece of *Episcia cupreata* var. *viridifolia*. Whether it is from the material originally described in Europe in 1885 I do not know, but it does match the description, having uniformly green leaves (going a bit bronzy, especially the newer growth, in high light) with fewer trichomes. *Episcias* can be almost chameleon-like in the way their appearance can change over time. The flowers are still the typical bright orange/red, however this plant is much less stoloniferous than is typical in this genus. As a result, this particular plant is less the groundcover and more just another plant in the terrarium, wedged between a rock and a giant *Streptocarpus* 'Fernwood's Silhouette' (a plant clearly with much less size influence from the *S. lilliputana* parent when no longer growing in a pot).

The only character of those mentioned above that is shared with *Episcia fimbriata* 'Blue Heaven' is the green leaves. But even here the leaf color is much lighter, made lighter still by the presence of a thick covering of predominantly clear trichomes that uniformly cover the leaves, stems, stolons and calyces. The flowers, slightly fringed as the species name suggests, are white suffused with blue that is more prominent in the petal lobes. Of the half dozen or so *Episcias* that I have grown (including the yellow-flowered *E. xantha* and a straight species *E. cupreata*, none of which resemble the great quantity of *E. cupreata* cultivars), *E. fimbriata* 'Blue Heaven' is the only one that I don't have enclosed. It sits on the top shelf in our kitchen greenhouse window where it receives some late afternoon sun — a good indication that at least some of the others would also do fine this way. However, most serve me well and seem perfectly happy as clumps or spreading groundcovers in my terraria. Some of these terraria also contain frogs that also seem to like the *Episcias*. Since it is my interest and intent to have *Episcias* that are lovely to look at whether in bloom or not, I am quite satisfied with these plants. I hope that you can say the same as you try growing *Episcias*, whether the species or the numerous cultivars.



Episcia lilacina illustrated in 1852 as *Cyrtodeira chontalensis* in *Flore des Serres*, t. 750.

Episcias in Paradise

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In April, 2000, I moved to my new home in Hilo, Hawaii, where it rains every day and in the winter it rains all day. The site consists of two adjacent house lots, each around one half acre, divided by a year-round small river. On one lot sits my home and on the other is a lake covering more than half of that lot. After spending the first two years clearing out overgrowth and assorted debris left by my predecessors, I noticed an intriguing plant (one that I was not familiar with) appearing in many places. It had a lovely red flower and was spreading out as a nice ground cover both on horizontal and on vertical surfaces. A little research proved it to be an *Episcia*, a member of the Gesneriaceae family – the only member of which I was familiar was *Saintpaulia*.

Further research on the Web made me aware of a number of different species and varieties that were in existence as well as other plants in the family and the search for sources was on. Realize that this is one of the most isolated occupied sites on Earth – everything is at least 2,000 miles away so sources are not easy to come by.

Finding gesneriads even more difficult to locate than African violets, I started out by ordering leaves of many violets that grew and became one of my major ground covers in time. Along the way I did manage to locate some *Episcias* and started to add them to the garden. With good intentions, all were marked with labels, but this proved to be a futile gesture. We are blessed (?) with mynah birds here (somewhat the equivalent to the mainland's starlings) who proceeded to pull out the labels and either carry them off or scatter them around. (The labels frequently end up in their nests.) Whereas there are no shows or people here who are interested in these plants, I gave up on the labeling and now just grow and enjoy them.



Episcias planted in Gary Meltzer's low rock wall



Episcias grow well outdoors enjoying the heavy rainfall in Hilo

The method that has worked best for me is to push a cutting, rooted or not, into the cracks and crevices of the rocks or into the moss that grows everywhere, and, if needed, put a rock or stick on top to keep it in place. Within a month the plants are usually growing and extending runners in all directions. In practice I think they grow better on vertical surfaces than on horizontal ones probably due to better drainage.

You will notice that I didn't mention any substrate. I don't use any! In my conditions, substrate has proven to be unnecessary. The lava is full of holes, and the roots of the plants simply lock on and derive whatever nourishment they need from wind-blown dust, rain, and organic debris falling from the trees above or from the mosses. I neither fertilize nor water. Hilo is the wettest city in the United States, with 500 cm (200") of rain a year at my location which is 19 degrees, 42 minutes, 33 seconds north; 155 degrees, 07 minutes, 29 seconds west. My average temperature is in the mid 20°C (70°F) range all year, with lows about 10 degrees less and highs 10 degrees more. Day length varies from 11-1/2 hours to 13 hours, but that is based on what we perceive, not what the plants can use. Ultraviolet radiation can be high during the middle of the day and may be a factor in growth (when it is not burning the leaves).

Most of my gesneriads are planted under a large monkey pod tree which gives high dappled shade through the middle of the day, but many of the Episcias get full sun and are doing well.

As to the moss that is evident in all of these pictures, my best success with seeds of all the gesneriads I have tried has been by sprinkling the seeds into the moss where they find conditions to their liking. Separating them is a problem as everything is interlocked, so I wait until they are at the first two true-leaf stage and do my best at salvaging what I can.

Episcias in Sweden

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Kopparblad is the Swedish name for *Episcia*. It means "copper leaf" which is very appropriate since both the ones with brownish leaves and those with verdigris shine relate to copper – the color of the metal itself and the color of the oxides and salts that we scrub away from pots and pans. The stolons inspired growers to use them in baskets and could easily cover the height of a window, like a curtain. Less inspiring were the dry brown edges of many leaves. In 1988 I was very surprised to see an *Episcia* growing as a ground cover in a garden in Thailand under shrubs north of a house – a very dark place compared to the scorching sunlight nearby. From then on I was more successful in my attempts to grow them until 2007 when nearly all of them were wiped out by powdery mildew, as were the *Smithianthas*. This fungus usually appears in early spring (when nights are cold and dry and days hot and dry) then goes away. Then it ruled for a whole year and was common also in the rest of Sweden. There was not an *Episcia* to be found for love or money. This year the *Episcias* are back.

All the available species, except *Episcia sphalera*, have been grown in our chapter. Most loved has been the hybrid of unknown origin that our member in Germany, Soili Damm, brought us from her native Finland. The dark brown foliage and an abundance of dark-yellow flowers made it an instant hit, and it needed to be named. "Suomi", the Finnish word for Finland, was deemed to be nice, short and appropriate. It is not identical to *Episcia* 'Sun Gold' which has dark green leaves and is small and hard to grow. I have grown them side by side and *E.* 'Sun Gold' is totally inferior, at least here in northern Sweden. Sadly, my *E.* 'Suomi', was one of the first to succumb to the powdery mildew.

My favorite *Episcia* is *E.* 'Kee Wee' with its pretty red leaves. I grow it next to a light stand out in the open in my plant room. It starts flowering in March, showing not a speck of mildew or brown leaf edges. Also still alive is an offspring of *E.* 'Suomi' won at a GHA raffle. It needs to grow enclosed though, preferably dripping in condensed moisture. This unexciting survivor has verdigris foliage and orange flowers.

Alsobias have been introduced here by our society but have not yet reached the trade. I have seen impressive specimens in greenhouses, but in my home I have trouble keeping them alive through winter. Taking cuttings and keeping them over winter in a mini-greenhouse at the end of a light stand is the safest way. After the equinox they can be potted up. Then they start growing at an impressive speed. One that has made it unharmed in open air through two winters is *A. dianthiflora* 'Costa Rica'. Sadly it has not yet flowered for me.

Only one of our members, who lives in Norway, seems to favor *Episcias* – *Achimenes*, *Kohlerias* and *Sinningias* like our climate better.



Episcia 'Kee Wee' (grown by Elaine Gordon; photo by Michael Riley)

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Episcias in Australia

Ruth Coulson <mrcoulson@iprimus.com.au>
Balcolyn, New South Wales, Australia

Episcias love it hot and humid. I used to live in Sydney and there are two things you can guarantee about a Sydney summer – heat and humidity. Now I live a bit further up the coast. It isn't quite as hot, but it is much more humid. The Episcias don't mind at all.

My Episcia-growing career began in the early 1980s with indiscriminate acquisitive enthusiasm, went through almost total rejection some ten years later, and has now settled into what I call controlled abundance.

If I intend exhibiting particular plants, I grow them in shallow saucers not allowing the stolons to grow over the sides. If they are just to decorate the plant room, I allow them to trail abundantly. Grown on the end of a high shelf, they will hang down a metre or more, providing a curtain of such beautiful foliage and flowers. This creates such lushness and colour that I can't imagine doing without them. I probably have more different ones than I need, but it is easy to propagate a new plant from an old one and I find this constant renewal keeps the amount of space they occupy under control.

Even the smallest Episcia stolon can quickly root and start growing. If I am propagating in the winter, I put the pots containing such stolons in covered transparent boxes until they are rooted. In summer they mostly do perfectly well on the open shelves.



Episcias growing at the home of Ruth Coulson in Australia
(*Episcia* 'Caroshelle' on the right)



Episcia 'Sunshine Shadows' (grown and photographed by Ruth Coulson)

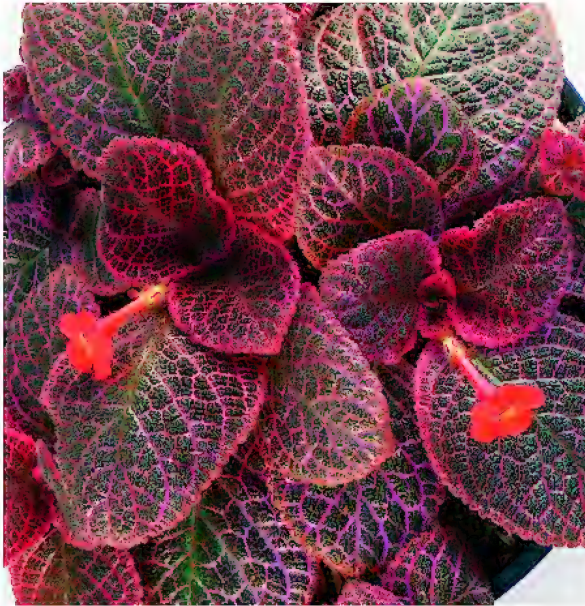
I know some people maximise the amount of bloom by removing all stolons, thus keeping the plant to one crown. Each time I have tried this, my results have been poor. The leaves have grown extraordinarily large and brittle, the stem has become tall and eventually fallen over, and the number of flowers has only briefly increased. I content myself instead by including in my collection those that naturally produce the most flowers, like *Episcia* 'Pink Panther' and *E.* 'Chocolate & Cherries'. I am only starting with *E.* 'Suomi' but am looking forward to its heavy blooming characteristics. On the whole, I find that when I give the plants plenty of light I get enough flowers.

And of course even without flowers, the leaves are some of the most highly decorative to be seen anywhere. I found with a certain amount of dismay that there are a good many "look-alikes" in the *Episcia* world. And the same cultivar can well look completely different depending upon exactly where I grow it, or indeed, if grown by someone else. Temperature, humidity and light characteristics have much to do with the leaf colouring. The most flamboyant and luminous foliage colours are seen when the temperatures and humidity are high. That is when flowering is at its peak, also.

This chameleon quality of the leaf colours has led me to grow just enough different ones to provide a good show in the plant room, but I no longer feel that I must have every cultivar I can lay my hands on. If those I grow are Australian hybrids, so much the better. In my early enthusiasm I found that there was actually someone in this country who was hybridising *Episcias* and had a whole range of them for sale. The Greenslade nursery was at Nambour, and each cultivar had the prefix "Sunshine" which derived from the fact that Nambour is on the Sunshine Coast of Queensland. Once I found out about these plants, no visit to that state was complete without a nursery stop and the acquisition of a few new *Episcias*.

When I rested from *Episcias* for some years, I disposed of many of the "Sunshines", and now it seems that many of them may have gone out of cultivation as Pat Greenslade, the hybridiser, no longer has an *Episcia* nursery. *Episcia* 'Sunshine Angel' is a confection of pink and silver with the only green being that underlying the silver. The hybridiser claimed it to be the most silvery *Episcia* she had grown. *Episcia* 'Sunshine Shadows' has pebbly pink/brown leaves with red and silver/green markings. The colouring is very vivid. *Episcia* 'Sunshine Charlie' is mostly green and brown, with a little silvery pink. *Episcia* 'Sunshine Rascal' used to be a favourite, but I don't have it any more. It had brown/green leaves with deep pink/red veining. *Episcia* 'Pat's Favourite' described below has some similarities. As far as I know all the "Sunshine" *Episcias* have orange/red flowers.

Pat Greenslade at one time sent some of her hybrid seed to growers in Sydney. Many beautiful plants were raised from it, but only one still seems to be in existence. Its colouring is similar to *Episcia* 'Sunshine Rascal', but according to a friend, Pat McKee, the veins are a much richer red colour in this red seedling. Early last year both Pat and I found we were, unaccountably, no longer growing the plant. We were unable immediately to locate it among other growers, and Pat was rather sad about that as she felt it was exceptional. Finally I found it in the collection of another grower and begged a small stolon to begin again. Pat was delighted and I began growing it on to share. This was not to be, as Pat became very ill in October and died in early December. Now I am propagating the plant so it can be grown by as many growers here as possible. We have named it *Episcia* 'Pat's Favourite' in her memory. It is shaping up to be a very worthy plant.



Episcia 'Pat's Favourite'
(grown and photographed by Ruth Coulson)

While I am fond of the small-growing *Episcias* like *E. 'Annette'*, *E. 'Coco'* and *E. 'Silver Skies'*, I really have no objection to the larger, more rampageous ones. Those that do well for me include *E. 'Pink Panther'*, *E. 'Kee Wee'*, *E. 'Caroshelle'*, *E. 'Frosty'*, *E. 'Country Kitten'* and *E. 'Country Cowgirl'*. Then, of course there are those with little chlorophyll but much pink colour in the leaves, like *E. 'Cleopatra'*. I like those, too. I don't play favourites!

Although my relationship with *Episcias* has had its ups and downs, they will always remain in my gesneriad collection. Their place is guaranteed by the fact that they thrive in the hottest months of the year with minimal care except regular water and a bit of fertiliser. Well, lots of fertiliser, actually. You don't get massive growth without regular amounts of plant food. But *Episcias* take my vote for being easy-care plants when everything else is stressed because of heat.

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Gesneriad Slide Programs

"A picture is worth a thousand words." Has your chapter shown one of our wonderful slide programs lately? Any one would make a great program for either a small or large chapter. Our newest program will be on the genus *Episcia* – it is almost completed and will be ready for reservations later this year.

Programs currently available in 35 mm slide format are as follows:

- Introduction to Gesneriads (56 slides)
- Rochester NY: Convention 2006 Flower Show (80 slides)
- Portland OR: Convention 2005 Flower Show (72 slides)
- Long Island NY: Convention 2004 Flower Show (80 slides)
- Sacramento CA: Convention 2003 Flower Show (78 slides)
- Morristown NJ: Convention 2002 Flower Show (80 slides)
- Achimenes (59 slides)
- Alpine and Cool-Growing Gesneriads (78 slides)
- Chiritas (60 slides)
- The Companion Genera: Nemanthus and Codonanthe (77 slides)
- Episcias (available fall 2009)
- Kohlerias (72 slides)
- Sinningias (80 slides)
- Streptocarpus Species (75 slides)
- Streptocarpus Hybrids (79 slides)
- Blue Ribbon Designs (73 slides)

Since we have only one copy of the 35 mm programs available for circulation, please contact me for information on the dates the program you are interested in is available. As always, I'll be happy to answer any questions.

Programs can be reserved by mail to Vivian Scheans, 4660 Dogwood Place, Lake Oswego, OR 97035-8412 or email <vscheans@comcast.net>. Specify the program to be reserved and the date the program is required. Since new programs are very popular, it is helpful if you provide as much lead time as possible, provide alternate dates, or alternate programs that would be acceptable. Please specify the address the program is to be mailed to and a contact phone number. Program rental of \$20.00 US payable to The Gesneriad Society must be received before the program can be shipped. Your request will be promptly acknowledged and programs will be shipped to arrive at least one week in advance of your reserved date. Programs on 35 mm slides are shipped pre-loaded in a Kodak-compatible carousel. Programs must be returned within 5 days of your reservation date via Priority Mail with delivery confirmation in the U.S. or the equivalent postal category from outside the U.S.



Episcia 'Ember Lace' (grown by Jill Fischer; photo by Jeanne Katzenstein) ... one of many varieties to be seen in the new *Episcia* slide program

Growing Pink *Episcias*

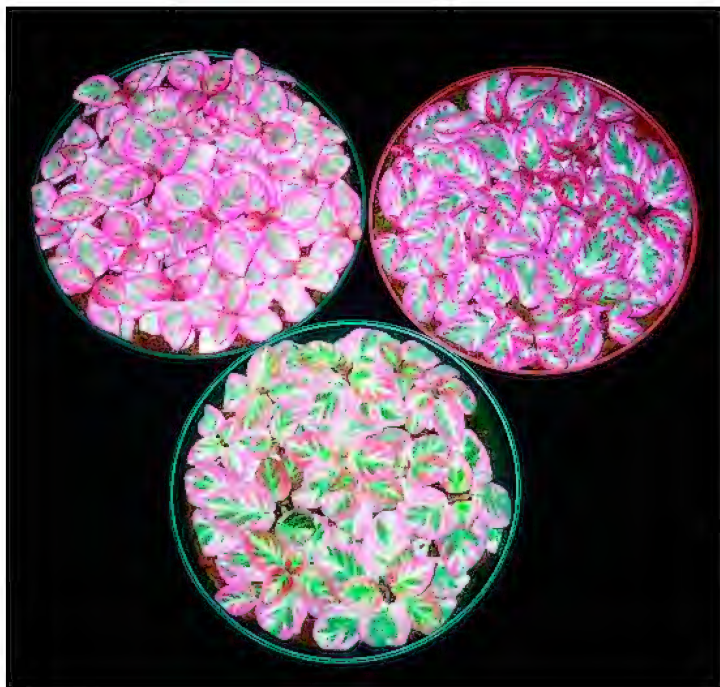
Jill Fischer <hf.jg.fischer@comcast.net>
Berkeley Heights, New Jersey, USA

Episcia 'Cleopatra' was the first gesneriad to catch my fancy many years ago. It was shown at a local African violet show along with a few "other gesneriads". I admired its beautiful and striking foliage – light green band up the midrib, surrounded by creamy white, and edged in bright and beautiful pink. It was displayed in a large bowl-shaped container with a clear dome. The exhibitor, Grace Hand, was kind enough to give me a plantlet. She encouraged me to join her at a Gesneriad Chapter meeting at the Frelinghuysen Arboretum, and the rest is history. Although Grace has long passed on, I somehow managed to keep that plantlet of *Episcia* 'Cleopatra' alive, and generations later it is still growing in my collection and remains one of my favorite gesneriad cultivars. I have tried growing many of the pink variegated *Episcias* and will describe how they grow in my conditions with a minimum of care.

Episcias are shallow-rooted plants that spread by means of stolons. If given a shallow container, with room to spread laterally, the stolons will easily root in a light growing medium. I use a soilless mix and amend it with additional perlite, vermiculite, and long-fibered sphagnum moss. The bottom of my container always is filled with a small layer of perlite to enhance drainage. I top-dress my container with a layer of pre-moistened, long-fibered sphagnum moss. The stolons root easily in the sphagnum moss. They grow most vigorously when the temperature is about 75°F (24°C) with 70% humidity. To achieve these conditions, the stolons are potted into 2-1/4" pots and are grown in a clear sweater box with the lid cracked open for air circulation.

The temperature in my growing area ranges around 65-80°F (18-27°C) depending on the season. Keeping the soil barely moist at all times helps prevent rotting at temperature extremes as these *Episcias* are very slow growing. Pink-leaved varieties seem to enjoy higher humidity than most other *Episcias*, and keeping them enclosed has helped them survive in my conditions. All of my gesneriads are fed bi-weekly using 1/8-strength fertilizer. I rotate feeding using several different brands of houseplant fertilizers such as DynaGro, Plant Marvel, and Optimara. All of my *Episcias* are grown on the same shelf under two 48" fluorescent light fixtures using GroLux WS bulbs. The plants are 5-7" below the lights which are on 12 hours per day. By growing several cultivars under the same conditions, their distinctive foliage characteristics are maintained.

When preparing *Episcias* for display, I select a 10" shallow bowl with a clear plastic dome. The dome has a 2-1/2" hole in the center to allow some air circulation while maintaining high humidity. After preparing the container with perlite and growing mix, I place 5 to 7 plantlets throughout the container, add the sphagnum moss, and put on the dome. Plantlets of the same size are chosen so they will continue to grow uniformly to fill in the container. I moisten the soil so it will be damp and NOT wet. To keep growth in the container fairly uniform I allow each plantlet to send out about 3 stolons. If the container starts to look crowded or growth appears uneven, I clip off any excess stolons. Any flower buds that form are removed to encourage foliage growth.



Episcia Collection: *E.* 'Cleopatra', *E.* 'Pink Dreams', and *E.* 'Unpredictable Valley' (grown by Jill Fischer and awarded Best Collection at the 1999 Convention Flower Show)

Many of the older pink-leaved cultivars display bright red flowers that seem to clash loudly with the beautiful pastel foliage. I have always removed the flowers from *Episcia* 'Cleopatra' for this reason. However, a few years ago *E.* 'Pink Smoke' was exhibited with an abundance of pink flowers that seemed to complement the ornamental foliage quite well. In my conditions, it is the most vigorous of the pink-leaved *Episcias* and propagates easily.

Other popular cultivars include *Episcia* 'Pink Brocade,' *E.* 'Unpredictable Valley,' *E.* 'Pink Dreams,' and *E.* 'Ember Lace.' *Episcia* 'Ember Lace' is particularly challenging as its leaves are brown and irregularly blotched with areas of pink and white. In my conditions, the best way to assure that the leaves maintain their pink and white coloration is to grow it cooler than the other pink-leaved *Episcias*. That plant is grown on the bottom shelf of a 4-tiered plant stand.

Growing pink-leaved cultivars of *Episcia* can be fun and rewarding. They are worth trying as their striking foliage is a great addition to any gesneriad collection!

In Memoriam

Albert Buell
Betty Vriens
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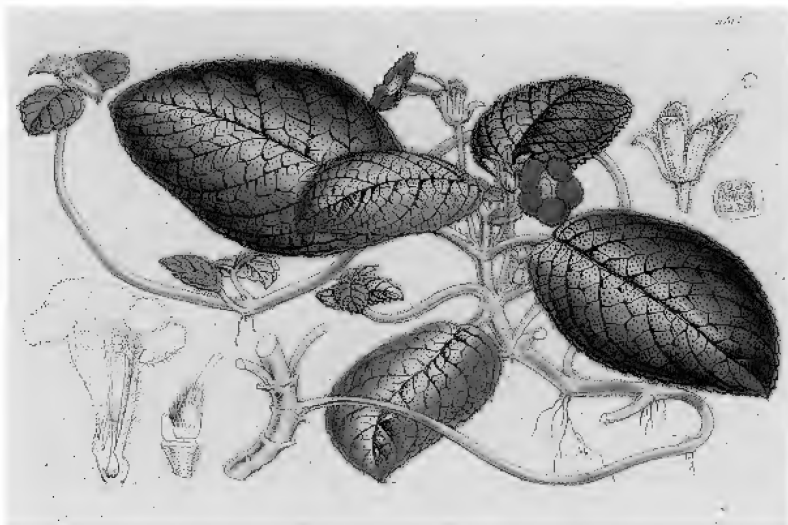
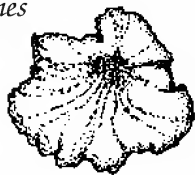
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1847 illustration of *Episcia cupreata* from Curtis' Bot. Mag., pl. 4312

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Growing *Episcias* in the Sub-Tropics

Lorrie Maher <qlngnsn@ozemail.com.au>
Brisbane, Queensland, Australia

I was introduced to the amazing culture of *Episcias* when I purchased a rather large specimen of *Episcia* 'Pink Panther' about twenty years ago and then grew it in a shallow round dish approximately 45 cm (18") in diameter. Its foliage reminded me of a *Coleus*, and I was enthralled by the pretty pink flowers. Unfortunately I found it very difficult to keep the potting medium moist because of the size of the dish and the numerous drainage holes. As the plant struggled to survive, I was unaware that I just had to plant stolons or sections of the root system to propagate more plants so my lovely *Episcia* went to plant heaven.

Over the years I have almost perfected the cultivation and presentation of *Episcias*, and my gesneriad collection always includes a number of show plants and smaller ones coming on. I mostly grow my *Episcias* under lights with the majority in dome terrariums – large and small. I use the same potting mix as I do for my *Saintpaulias* and regularly alternate a fish emulsion and Phostrogen, a balanced plant food high in potash. Mature plants are grown in various-sized shallow pots as suits their size. By placing the plants on an upturned pot or recycled food container surrounded by moist sphagnum moss in the terrarium, I ensure that the humidity is high and can partly close the hole in the top of dome when we experience cooler to cold temperatures. The terrariums are about 25 cm (10") below the lights.

Here in Brisbane I am also fortunate to have extended periods of warm to hot months and a covered balcony facing northeast that brings morning sunshine. The overflow from my plant stands and small *Episcias* (planted for trading at meetings and our annual show) live in smaller propagating "houses" in little greenhouses. I can control the light and temperature by the



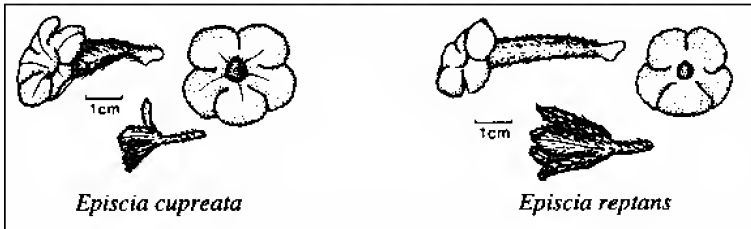
Episcia 'Aussie Sunshine' (grown and photographed by Lorrie Maher)

use of shade cloth and/or clear plastic zip front covers which also keep the intruding possums out at night. Lately I have found supplies of the domes used on take-away drink containers which just happen to fit my 9 cm (3.5") diameter pots. By wicking these plants and placing them on a grid (normally used as a cake cooler) over a community dish of water, I can increase my plant holding. (I really hate to discard stolons as I groom my bigger plants.)

I find cultivars such as *Episcia* 'Checkerboard' and *E.* 'Aussie Sunshine' prolific growers and others such as *E. fimbriata* 'Blue Heaven' and *E.* 'Frosty' needing constant attention to avoid leaves sweating off. I can always rely on *Episcia* 'Kee Wee', *E.* 'Red Dawg', *E.* 'Annette', and *E.* 'Country Kitten' to be ready when I need to enter a plant in a competition. I struggle with plants that have the variegated pink, cream and green foliage. Mine are slow growers, and *Episcia* 'Cleopatra' blocks at certain times of the year. If I am not vigilant in removing such sections, the whole plant blocks.

I find that my plants have increased flowers when I let them partially dry out. Like all plants experiencing unusual stress, they flower to ensure "survival of the species". If I were just growing for pleasure, then I would multiple-plant healthy heads instead of just having a central plant and pinning the stolons to fill the pot. I have seen *Episcia* specimens growing as hanging baskets with long trailing stolons at plant markets in north Queensland, and even further north many people have *Episcias* growing luxuriantly as ground covers in shaded gardens. We could not do this in Brisbane as the plants would die when we get cold snaps at night. When members of our African Violet Society ask me to try to identify an *Episcia*, my first question is "Where do you grow it?" as different growing conditions can produce dramatic variations of the same cultivar.

My favourite *Episcias* are *E.* 'Western Red' with its deep red tones as it always grows so symmetrically with particularly strong growth, *E.* 'Chocolate 'n' Cherries', *E.* 'Cleopatra', and the miniature *E.* 'Silver Skies'.



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Growing *Episcias* in Drier Climates

Leonard Re <buffboy@socal.rr.com>
Fountain Valley, California, USA

Episcias can be successfully grown in drier climates. I live in Southern California which is a semi-arid climate. I'm about five miles inland from the Pacific Ocean with a Fahrenheit temperature range in the 60's to 80's most of the year. Our humidity runs around 30-40%. The main exception occurs in the October-November timeframe when the winds reverse and blow from the desert to the ocean. During this time, the temperatures increase to the 90's and the humidity drops to the 10-15% range.

I grow all my *Episcias* uncovered except for the pinks such as *Episcia* 'Unpredictable Helen', *E.* 'Unpredictable Valley', and *E.* 'Cleopatra'. However, I do grow *Episcia* 'Pink Smoke' uncovered and it does great. I use my standard AV mix – peat moss, vermiculite, perlite (1-1-1) with a little dolomite lime and charcoal. I use the same fertilizers that are given to my African Violets. I rotate DynaGro (1/2 tsp. to a gallon of water), Jack's Bloom Booster 10/30/10 (1/4 tsp to a gallon of water), Eleanor's VF-11 (4 capfuls to a gallon of water), and Urea-free Orchid Fertilizer 20/10/20 (1/4 tsp to a gallon of water). I use distilled water adding 10 drops of "pH Up" per gallon.



Episcia 'Pink Smoke' grown by Leonard Re
(awarded at the 2009 AVSA Convention) (photo by Dale Martens)



Episcia 'Thad's Red Crocodile' grown by Leonard Re
(awarded at the 2009 AVSA Convention) (photo by Dale Martens)

All *Episcias* are grown either under a four-tube fixture (using cool whites) or right next to the light stand on individual TV trays. They all receive an early-morning misting with the distilled water (including the "pH Up" additive but no fertilizer). I like to start my *Episcias* by planting three sturdy stolons into an Oyama pot. After they are established, and have developed about three additional stolons on each original stolon, I transplant them into a large 6" pan pot using two wicks for proper water absorption. By removing the extra stolons (beyond 3 or 4) and the flowers, I have larger foliage with better coloration. I certainly enjoy growing *Episcias* and especially love those recently developed by Thad Scaggs and Betty Cessna.

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Hybridizing *Episcias*

Thad Scaggs <tascaggs@bellsouth.net>
Spring Hill, Florida, USA

I have grown African violets since the 1980s and began showing them and a few of the pink *Episcias* in 1991. Having done well at the shows, I decided to try my hand at creating an African violet. I made one cross in 1993 and have one African violet hybrid, which I named 'Mother's Love', to show for it. I grew it through many generations, finally registering it in 2002, so I knew the basics of hybridizing.

My desire to hybridize *Episcias* began in 2003 when I noticed a seed "berry" on one of my plants. I say "berry" because the fleshy capsule of *Episcia* seeds is rounded like a berry while African violet and many other gesneriad seed capsules are more oblong to a slight point. When I saw the "berry" it reignited my desire to create something new. Since I had the time and the space, not to mention a dozen or more *Episcias*, I started looking specifically for information on hybridizing *Episcias*. I searched online and dug through every authoritative book I could find. I now have a much larger collection of books on gesneriads and really enjoy having books on my favorite subjects. The point is that in all of my research, I found nothing on hybridizing *Episcias* – specifically, the best conditions for pollination.

Since I knew the basics involved in pollination, I tried taking the pollen from the anthers of a blossom on one plant and touching it to the stigma on another like I had done to pollinate an African violet. Now just to briefly describe the process: you take the little yellow anthers in the center of your blossom and open them where you will find the pollen. This yellowish to white powdery-looking substance is then applied to the stigma which is the almost translucent-looking circle sticking out on the end of the pistil in the center of the blossom surrounded by the yellow anthers. The stigma must be watched carefully as the timing is critical for it to be receptive to the pollen. You will usually see it open or enlarge, and hopefully you will see a slight glistening on the tip of the stigma. This is the perfect time to apply the pollen. Sounds easy, doesn't it?

There are many things you can use to pollinate a blossom. I tried Q-tips, small paint brushes, the end of a cocktail pick, flat tooth picks, and my thumbnail. I generally use my thumbnail as it is my pollinator of choice. I can pinch the anther(s) from a blossom with my right thumb and forefinger, then with my left thumb open it onto my right thumb nail and the angle works well for me to hit the stigma. To keep track, I learned to mark my crosses using the acrylic paints you can buy at hobby shops or the craft section in many stores. The outer calyx or stem of the seed blossom, the one I tried sticking the pollen to, I would mark with a color. I found using a flat tooth pick best for that as I already had a box of toothpicks and could then toss those instead of cleaning a brush, plus I could use both ends. Then on a pad I would write the color/ date/ seed or mother plant × the pollen or father plant. This worked out fine, except that I couldn't get an *Episcia* pollinated, try as I might. I must have tried 100+ times. I am not kidding – I tried at least that many times! I was vigilant and knew success was right around the corner, somehow, someday.



Thad applying pollen to a ripe *Episcia* stigma

There's another difference with pollinating *Episcias*. You rarely find self-pollinated *Episcias* because the pollen and stigma aren't ready at the same time on a blossom. The pollen will be ready a day or two after the blossom opens but the stigma won't accept the pollen until it's been open 4 or 5 days except in the case of the lavender-flowered *Episcia lilacina* varieties. The blossoms don't last four or five days on those usually so you catch them when you can. It's a good idea to try two or even three days in a row. I was trying everything for months. I even tried barely wetting the stigma so it would hold the pollen but that didn't work either. I had spent so much time already that I was not going to give up. I knew I would figure out my obstacle and work around it. I tried early in the morning, midday, afternoon, and evening like I mentioned before. I had little paint marks of all colors on so many dried blossoms, my *Episcia* shelves looked like an artist's palette, but no "berries"! I was still increasing my collection of *Episcias* because they are easy to grow, especially in the heat and humidity of Florida, and I do love the beautiful different leaves they offer.

My breakthrough finally came when a friend in Tennessee sent me some stolons. They were large with air roots (from where she had them in very high humidity) and were ready to be potted up and take off. I did pot them up immediately and put them in a flat with a high dome terrarium top. One had several blossoms that were still pretty fresh since it was shipped in a gallon zip-lock bag that was inside a Styrofoam cooler. I thought I'd give these a try since I'd tried everything else. I retrieved some pollen from another *Episcia* and applied it to the stigmas. Then I closed the dome back up so the stolons could finish rooting and put it on the shelf.

I checked them regularly each time I watered and cleaned my plants, everything we plant lovers normally do. Then one time when I checked those *Episcia* stolons from Tennessee in the dome, I looked twice as I couldn't believe I saw three "berries"! That was IT! I knew immediately the stigma had to be ready as well as the pollen, but the high humidity was the answer to my problem. To confirm this, I put a variety I wanted to use as the seed parent into a domed tray, gave it a day and then added pollen. Yes that was my answer, so I started crossing like I had before ... but now I was getting "berries"! I found it took two to four months for them to mature and I could harvest the seeds (usually closer to two months depending on the time of year). *Episcia* fruit (actually a bivalved, fleshy capsule) will split a little bit

and you can see the seeds inside in a white substance called albumen. I have learned recently that the white substance is more like an embryonic gel. This gel dries up and has no effect on the seeds when you sow them. (Much of the gel you can pick out if it bothers you, but it dries into very small flake-like pieces.) If your seeds are stored in the refrigerator, they should remain viable for several years.

When my first "berries" were ripened and then allowed to dry, I had 10 to 12 crosses to sow. I had worked so long to get my first fruit that I sowed some of each cross but too many seeds of each. I used the method of moving the seedlings in their pot every two weeks, or "tickling the roots" as it's called. The seedlings will double in size compared to seedlings not tickled in the first 8 weeks, since it's the root stimulation that makes them grow. (With mature plants we don't often disturb their roots so they do not have a break in culture.) I watched the seedlings grow and was amazed at all the beautiful colors and textures of the leaves. My first reason for breeding was the foliage. I worked specifically for blossom color later. I grew out well over 100 seedlings from the crosses, way too many I found out. You should either grow many seedlings from fewer crosses or fewer seedlings from more crosses. I think growing fewer seedlings from more crosses was the better choice. This first group I grew out I kept color-coded and watched closely. At six months or so I started naming the better hybrids (in my opinion). I propagated and shared with my African Violet and Gesneriad Clubs and found out very soon that young *Episcias* are like chameleons! They change colors and textures so much that one I had named three months earlier would now look nothing like it did when I named it. Hybrids that were exceptional and absolutely beautiful would become dull and look like a dozen other plain ones. Growing *Episcias* out became a waiting game.

In the end, I named around eight that I am very proud of from that first group of over one hundred. That group is where my two pink-blooming *Episcias* came from, specifically *Episcia lilacina* 'Blue Nile' × E. 'Citrine'. *Episcia* 'Thad's Pink Passion' is my light- to medium-pink with brighter pink spots in rows and a little yellow in the throat, very similar to a *Kohleria* blossom, with shiny light-green foliage that has a brown serrated edge.



Some of Thad's *Episcia* seedlings showing variation in the foliage



Episcia 'Thad's Pink Passion'



Episcia 'Thad's Diamond Dust'

I used *Episcia* 'Cleopatra' Canadian Clone in several crosses. It had plenty of pollen to offer. I did get two selfings of this variety, but after sowing a small amount three times, I never got anything except white seedlings. No matter what I did, I couldn't get any to live more than a couple of weeks. Few made it that long. I tried fish emulsion, Epsom salts and high-nitrogen fertilizers but I could never get anything to show the slightest hint of green. A few times I spoke with Jim Bodnar of Jim's Episcias in Canada and traded a few plants with him. He thought selfing good hybrids was a way to get more good hybrids, and I did get a couple of my named hybrids from selfings.

I also worked on a project (initiated by Dale Martens and the Gesneriad Hybridizers Association) with Betty Cessna of Pennsylvania on getting yellow blossoms from *Episcia* 'Suomi' crosses. We tried selfing *E.* 'Suomi', the beautiful yellow-blooming *Episcia*, with the results being the usual orange-red *Episcia* bloom though we would get a wide range of foliage colors. We found by selfing the seedlings, crossing two of the seedlings together, or back-crossing a seedling with *E.* 'Suomi' we could get yellow blossoms. The yellow blossoms from the second generation did not have the orange in the center that *E.* 'Suomi' has. Although the leaves came in many different shades, it was the light- and bright-green seedlings that bloomed yellow. I did have a seedling that was a light silver-green with very little, if any, bright green around the edges with a canary yellow blossom. It became *E.* 'Thad's Yellow Bird'.

Altogether, I have about 25 or so seedlings that I eventually named out of nearly 50 crosses. They have been distributed to many growers, and I hope they are enjoyed enough to be spread around and shared with more gesneriad growers. I have a few more *Episcia* seedlings I'm growing out at present and also several *Sinningia* and *Kohleria* seedlings starting to bloom. Yes, that hybridizing bug has bitten me and I may even try hybridizing African violets again because I still enjoy growing and showing them ... and, of course, there are always *Chiritas*, *Smithianthas*, *Streps*, and well, you know our choices.

Episcia 'Silver Skies' Ball

Dale Martens <dalemartens@mchsi.com>
Sherrard, Illinois, USA

My goal was to create an unusual show entry of a hanging *Episcia* using a grapevine ball. I knew I would need quite a few plants for this experiment, so I rooted around 70 tips and stolons of *Episcia* 'Silver Skies'. I bought a seven-inch diameter grapevine ball at a craft store and filled it with orchid moss, a very fluffy sphagnum, purchased as a small bale at a local hardware store. First I soaked the sphagnum in boiling water to help kill any critters and mold spores. I stuffed the grapevine ball with the sphagnum and nothing else. Then I added the rooted *Episcias*, pushing the root area deep into the sphagnum.

The only way to water the ball was to pour water with fertilizer added through the sphagnum. This meant I needed a bowl to catch the excess water. I put aluminum foil under the bowl to help reflect light on the underside of the ball, yet I knew the ball would have to be flipped each day to allow all the *Episcias* to enjoy the light from the fluorescent tubes above. Therefore, I put two long, sturdy plastic sticks through the ball. One would not want to use wooden sticks because the sticks constantly touch very wet sphagnum and the wood most likely would rot. The plastic sticks held the ball onto the edge of the bowl and kept the rooted stolons under the ball from getting squished. Each day I held onto the sticks and flipped the ball. (The first photo shows a container of rooted tips and stolons, a bowl of sphagnum and the grape vine ball with a few of the *Episcias* stuffed into the sphagnum.)

It took three months (from January 20 to April 23) for growth to fill in the gaps in the ball. I did allow some stolons to form, especially if they helped to fill in gaps. This means I flipped the ball every single day for over three months! If I were to do the ball over again, I'd grow it as halves, then



Episcia 'Silver Skies' – the early stages of creating the ball (January 20)

put the halves together with wire about four weeks before the show. That would give it time to fill in gaps where the two hemispheres attached. At least then I'd only have to flip it for four weeks.

At a craft store I found a very heavy and tall hanger that normally held a lantern. The *Episcia* entry was driven to the AVSA convention with the ball resting on its sticks over the bowl. When I arrived at the convention hotel, I used fishing line to hang the ball. Then I removed the sticks. The entry got a lot of positive reaction and surprised looks from people as well as a Best in Class award.



Episcia 'Silver Skies' – awarded at the AVSA Convention (April 23)

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Sinningia (tubiflora × incarnata) × self

- *Sinningia 'Neese' × self*
- *Streptocarpus 'Joker' × self*

Send orders for hybrid seed to:

Gussie Farrice, 121 Nelson Avenue, Staten Island, NY 10308

Deletions to the Hybrid Seed List

Sinningia 'Pink Ice'

Sinningia ('Scoundrel' × self) × self

Sinningia speciosa pink × self

Streptocarpus 'Iced Pink Flamingo' × 'Bristol's Lipstick'

Streptocarpus hybrid lg. burgundy

Streptocarpus subgenus

Streptocarpella: caulescens × pallidiflorus (natural hybrid)

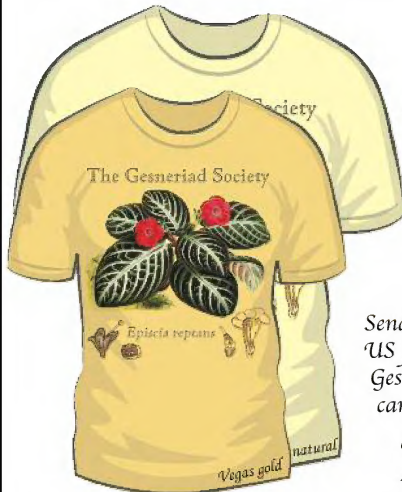
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Episcia 'Pink Panther' – a "classic" *Episcia* hybridized in 1978 by Harry Luther and still widely grown today (photo from Society archives)



Episcia 'Suomi' – a recent hybrid from Europe destined to become a "classic" (grown and photographed by Dale Martens)